ABSTRACT

AIMS & OBJECTIVES

- ✓ To correlate clinicoradiological characteristics of bronchiectasis with pulmonary hypertension

OBJECTIVE

Primary Objective

- ✓ To correlate clinicoradiological profile of bronchiectasis

Secondary Objective

- ✓ To correlate clinicoradiological profile of bronchiectasis with severity of pulmonary hypertension
- ✓ To correlate clinicoradiological profile with physiological charecteristics of bronchiectasis

MATERIALS AND METHODS

The study aim to correlate the clinicoradiological parameters of bronchiectasis,and to assess the severity of exercise capacity and Pulmonary Artery Hypertension in these patients.Clinical and radiological predictors will facilitate futher understanding of pulmonary atery hypertension and thereby affect treatment outcomes.

Study type

Prospective cross-sectional study

Study Duration

12months

Study Locale

PSG Institute of Medical Sciences and Research

Study Method

Convenience Sampling

Sample Size

40 subjects

Inclusion Criteria

- ✓ Age 18 to 65 years
- ✓ Cases of Bronchiectasis diagnosed based on clinico radiological profile
- ✓ Willing to participate in the study adhering to its protocol

Exclusion Criteria

- ✓ Patients not having acute exacerbation or active infection
- ✓ Patients with Primary PulmonaryHypertension(PPH)
- ✓ Patients with pulmonary hypertension attributable to primary causes other than bronchiectasis
- ✓ Mental status not competent enough to consent for the study in the study adhering to its protocol

RESULT

40 patients included in this study with 17 males and 23 females using variables like age, gender, BMI, HRCT findings, pulmonary artery hypertension, 6 minute walk test, pulmonary function test, MMRC score and BORG scores.

These patients were further classified into 3 different groups cystic, cylindrical and varicose. In our study a significant correlation is seen between pulmonary function test and extent of bronchiectasis with ($p<0.05$) pulmonary hypertension. Compared to other groups the correlation with cystic group was more significant. Pulmonary function tests shows significant positive correlation with HRCT score and 6 minute walk test.

There was a significant correlation between 6 minute walk test with extent of bronchiectasis ($r=0.25$).There was no significant correlation between the extent of involvement and pulmonary artery hypertension with extent of bronchiectasis. The MMRC score and BORG score was not proved to be an effective tool in assessing the extent of bronchiectasis.

CONCLUSION

1. Those patients with cystic bronchiectasis developed pulmonary artery hypertension and MMRC score was higher in the cystic group.
2. Pulmonary function test (FEV1/FVC and post FVC) also had good significant correlation in this study and thereby proving it is a strong predictor of Pulmonary hypertension.
3. 6 Minute Walk Test (<400Mts) also has a good significant correlation.